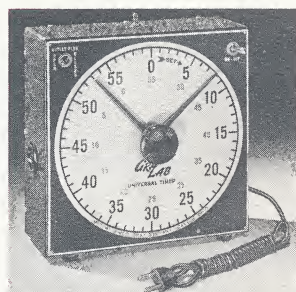


GIRA LAB UNIVERSAL TIMER

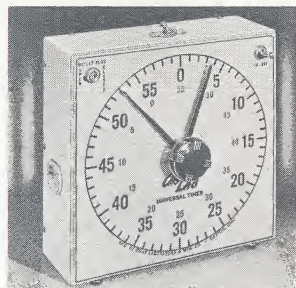


***shows minutes
and seconds
in total
darkness!***

**MODEL 168...
luminous (phosphorescent) dial**



MODEL 165... non-luminous dial in black and aluminum color combination. Inner circle of small red numerals is designed for stop-clock timing.



MODEL 167... similar to Model 165 except dial and case have white enamel finish, making this model especially suitable for medical, laboratory and commercial kitchen usage.

PHOTOGRAPHERS...TECHNICIANS...GET ALL THESE FEATURES IN ONE INEXPENSIVE TIMER!

- Combines minute and second timing from 1 second to 60 minutes—3600 possible settings!
- Large dial—8 inch diameter—can easily be read from across the room!
- Makes it possible to work in total darkness on processes that must be accurately timed—such as color photography!
- Automatic switching for control of photographic enlarger or other electrical appliances!
- Clear buzzer signal indicates end of film development or other periods!
- Split-second synchronous accuracy—better than 1/70 of 1% at maximum interval setting!

DIMCO-GRAY COMPANY

207 East Sixth Street • Dayton 2, Ohio

Litho in U.S.A.

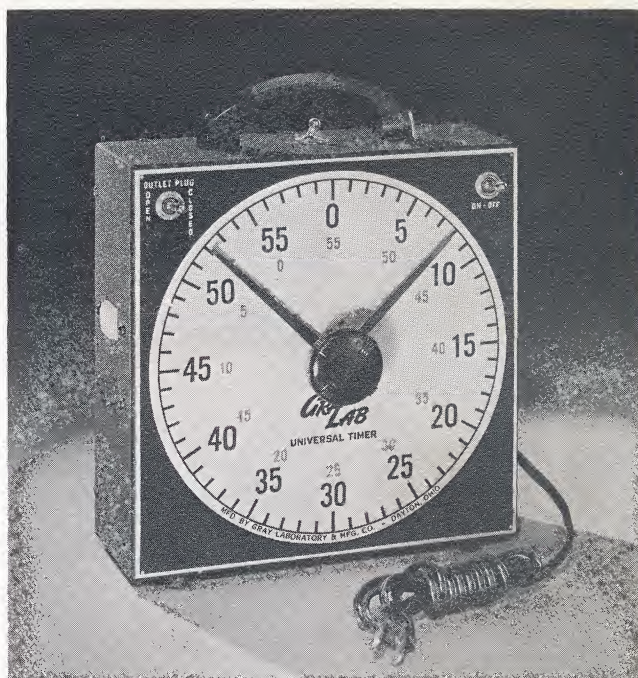


UNIVERSAL TIMERS

MODEL NOS. 170, 171, 172 and 173

DESIGNED FOR SUSTAINED ACCURATE TIMING IN . . .

- ★ **LABORATORY TESTS**
- ★ **PROCESS ENGINEERING**
- ★ **INSPECTION TESTS**
- ★ **INSTRUMENT
CALIBRATION**
- ★ **GRAPHIC ARTS**
- ★ **PLUS MANY OTHER USES**



MODEL 171

AT LAST automatic switching interval timers with dials sufficiently large to read accurately—even across a large-sized room . . .

Now offered in a complete variety of time ranges and settings to meet every requirement for the exact timing of many varied operations . . .

And note—the GRALAB Universal Timer does more than replace TWO ordinary interval timers because—ONLY GRALAB Vernier Action achieves the exclusive advantage of split-second accuracy and extended range with —

3600 Distinct Settings on TWO HANDS

There is a GRALAB Timer for every timing operation—inquire today.

Litho In U.S.A.

Adaptability...

IS THE KEYNOTE OF EVERY GRA-LAB TIMER

FOUR VERSATILE MODELS

Model No.	Minimum Setting	Total Range
172	$\frac{1}{4}$ Second	15 minutes, by minutes, seconds and quarter-seconds.
171	1 Second	60 minutes, by minutes and seconds.
173	15 Seconds	15 hours, by hours, minutes and quarter-seconds.
170	1 Minute	60 hours, by hours and minutes.

Capacity: 6 amps at 125 volts.

CHECK THESE FEATURES!



Model 172

Two outlet receptacles . . . one, controlled by selector switch, will either make or break circuit at zero; the other, independent of selector switch, breaks circuit at zero. Equipped internally with "quick-make, quick-break" snap-action switch.

8-in. diameter dial . . . inner circle of numerals on dial permits the use of GRALAB Universal Timers as elapsed-time indicators (stop-clocks).

Signalling feature . . . Every GRALAB Universal Timer is equipped with a selective, automatic buzzer alarm which signals the expiration of pre-selected time interval, if desired.

DIMCO-GRAY COMPANY

207 E. SIXTH STREET - DAYTON 2, OHIO

"DESIGNERS AND MANUFACTURERS OF MOLDED PLASTIC PRODUCTS AND ELECTRICAL INSTRUMENTS"

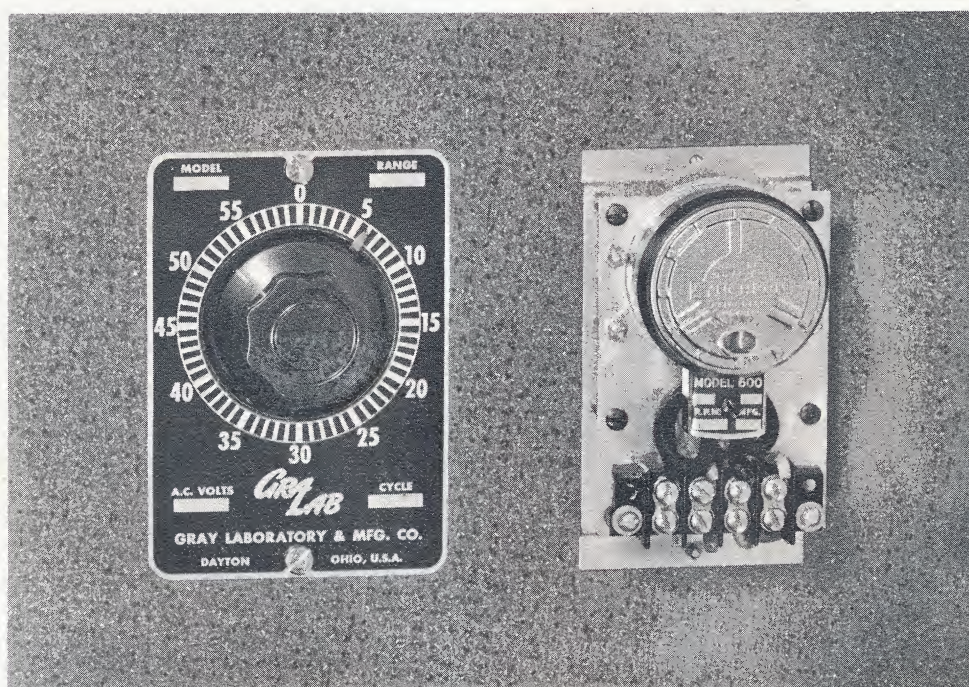


INTERVAL TIMERS

MODEL NOS. 179-180

- ★ **DOUBLE-RANGE MODELS**
- ★ **PANEL MOUNTING**

**SPLIT SECOND ACCURACY!
PLUS... EXTENDED RANGE!**



FRONT

MODEL NO. 180

REAR

NOW, Panel Mounting Interval Timers are available incorporating the well-known GRALAB VERNIER ACTION which more than replaces TWO ordinary interval timers with its extended range of - -



3600 Distinct Settings on TWO HANDS

There is a GRALAB Timer for every timing operation - inquire today.

GraLAB

The Name Synonymous With . .

ACCURACY!

QUALITY!

STANDARD TIME RANGE

Model	Total Range	Dial Divisions
179	15 Minutes	1/4 Seconds
180	60 Minutes	Seconds

General Description - These GraLab Double Range Timers are compact panel mounting interval timers which can be manually set for an unusually wide range of time intervals - for example, the Model 180 can be set in minutes and seconds for any period between 1 second and 1 hour, while the Model 179 is settable by 1/4 seconds up to 15 minutes.

A synchronous motor driving the gear mechanism insures accuracy and trouble-free operation. The timers operate equally well mounted in horizontal, vertical, or inclined positions.

Quick-make, quick-break, snap-action switch automatically switches one circuit ON and another circuit OFF at the end of desired time interval. Switch capacity: 10 amps at 125 volts.

The accuracy of these timers may be best understood by first pointing out that the synchronous motor is as accurate as the frequency control of the A.C. power system being used. Since the "ZERO" or "DROP-IN" error does not increase with increasing time intervals, the full-range percentage error of the timer itself is phenomenally small (approximately 7/1000 of 1 per cent).

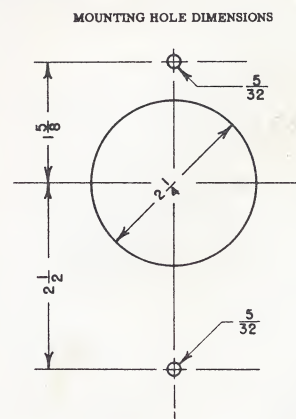
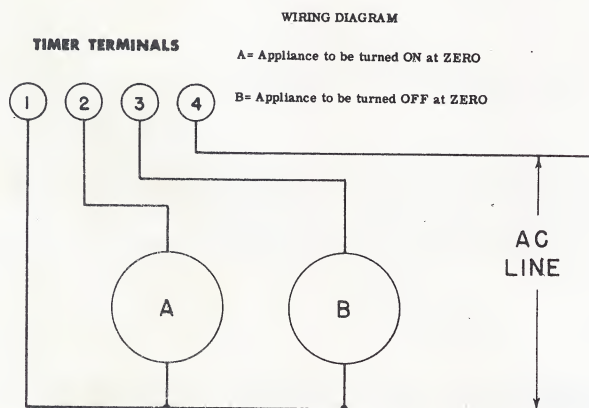
Installation - All GraLab panel mounting timers are normally supplied uncased, suitable for mounting against rear of panel (1/32 inch to 3/16 inch thick) with setting knob, hand, and dial on front of panel. Clearance hole dimensions in panel are as indicated in the accompanying sketch.

Terminal strip on rear of timer facilitates electrical connections as shown in wiring diagram.

Clearance Dimensions - The clearance dimensions of the timer behind the panel are 2-3/8 inch x 4-7/16 inch x 2-7/16 inch deep. The setting knob extends out approximately 29/32 inch in front of the panel. Dial dimensions are 3-1/8 inch x 4-1/2 inch.

Ordering Information - Standard models are available in 110 or 220 volts, 50 or 60 cycle. In addition to the model number, voltage and cycle should be specified on orders.

A.C. Buzzer Assembly - Where an audible signal is desired to signal the end of the timing period, the GraLab Model 225 A.C. Buzzer Assembly can be supplied along with these panel mounting timers. This buzzer assembly requires separate mounting to the panel on which the timer is being installed.



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"DESIGNERS AND MANUFACTURERS OF MOLDED PLASTIC PRODUCTS AND ELECTRICAL INSTRUMENTS"



MICRO TIMERS

MODELS 201 and 202

DESIGNED TO MEET EXACT TIMING REQUIREMENTS IN:

- * **MICRO-MOTION STUDY**
- * **PHYSICAL and
CHEMICAL TESTS**
- * **PRODUCTION ENGINEERING**
- * **INSTRUMENT CALIBRATION**
- * **PROCESS ENGINEERING**
- * **SPORTS TIMING**



If your requirements demand an elapsed-time indicator that -

CAN BE EASILY SEEN AND READ -

GRALAB Micro-Timers are equipped with large 8 inch dials.

CAN BE REMOTELY STARTED AND STOPPED -

GRALAB Micro-Timers have remote start-stop control.

CAN BE OBTAINED AT AN AMAZINGLY LOW PRICE -

comparable to medium priced stop-watches having only one or two of the features of the GRALAB Micro-Timer . . .

- - then, you will be interested in reading the details on this versatile instrument described on the reverse of this sheet.

Litho in U.S.A.



MICRO TIMERS

AVAILABLE IN TWO MODELS

MODEL NO. 201

Reading to 1/1000 minute
Through 10 minute range

MODEL NO. 202

Reading to 1/10 second
Through 1000 seconds

BOTH INCLUDE

SYNCHRONOUS MOTOR DRIVEN from standard 110 volt, 60 cycle outlet which will insure extreme accuracy and years of trouble-free operation.

LARGE 8 INCH DIAL with bold white numerals and graduations against a black background. Sharp image when used in the high-speed motion photography of time-and-motion study.

QUICK START-STOP from switch on timer or from remote control cord set switch . . . readily adaptable to automatic start and stop . . . quick manual reset feature to facilitate simultaneous centering of hands at zero point.

No electromagnetic clutch to give trouble . . . split-second start-stop through inherent operating characteristics of synchronous motor.

Enclosed in sturdy steel case . . . rugged construction to insure maximum wear under the most trying conditions.



PORTABILITY AND FLEXIBILITY . . . convenient carrying handle for shop and laboratory usage, with the following means of mounting to meet every location problem:

- (a) Can be set on table, bench or shelf . . .
- (b) Can be hung on wall . . .
- (c) Handle provides means of suspending from ceiling . . .
- (d) Standard Camera tripod mounting allows for greatest flexibility in matter of setting up in difficult locations and, furthermore, allows for tilting to camera angles, thereby eliminating the problem of parallax in reading.

There is a GRALAB Timer for every timing operation - inquire today.

DIMCO-GRAY COMPANY

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"DESIGNERS AND MANUFACTURERS OF MOLDED PLASTIC PRODUCTS AND ELECTRICAL INSTRUMENTS"

PRICE LIST #6

GRALAB ELECTRIC TIMERS

Jan. 8, 1962

Model No.	Range	Dial Divisions	Type	List Price
165	60 Minutes	Seconds	Portable Interval	\$25.00
167	60 Minutes	Seconds	"	28.00
168	60 Minutes	Seconds	"	26.00
170	60 Hours	Minutes	"	30.00
171	60 Minutes	Seconds	"	28.00
172	15 Minutes	1/4 Seconds	"	31.00
173	15 Hours	1/4 Minutes	"	31.00
179	15 Minutes	1/4 Seconds	Panel-Mounting Interval	21.00
180	60 Minutes	Seconds	"	19.00
181	60 Hours	Minutes	"	21.00
201	10 Minutes	1/1000 Minutes	Portable Stop-Clock	39.50
202	1000 Seconds	1/10 Seconds	"	39.50
225			110 Volts A. C. Buzzer Assembly	1.50

Prices above apply to models for 110 volt-60 cycle AC operation only.

GRALAB Timers are available for operation on alternating current only, and can be supplied with 110 volt-50 cycle, 220 volt-50 cycle, or 220 volt-60 cycle motors at the following list price adders:

Models 165, 167, 168, and 180 at \$2.00 additional.

Models 170, 171, 172, 173, 179, 181, 201, and 202 at \$5.00 additional.

Above prices are net, f.o.b. destination in the continental limits of the U.S.A., and are quoted subject to change to price in effect at time of shipment.

DIMCO-GRAY COMPANY 207 E. Sixth Street Dayton 2, Ohio

Phone 222-6703, area code 513

DIMCO-GRAY COMPANY



207 E. SIXTH STREET • DAYTON 2, OHIO

PHONE 222-6703 • AREA CODE 513

ELECTRIC TIMERS

January 12, 1965

Mr. T. Nelson
Systems Consultant
Box 1546
Poughkeepsie, New York

Gentlemen:

Here's the information you requested about GRALAB Timers, and thanks for the opportunity to tell you about these fine instruments.

In looking over our catalog sheets enclosed, be sure to note that a single GRALAB Timer, in many cases, will perform ALL OF YOUR timing operations.

Thus, the Model 171, which is typical of the line, features -

- ...A GIANT 8" DIAL to eliminate eye strain, with double markings to permit elapsed time readings.
- ...An AUTOMATIC BUZZER SIGNAL to let you know when time is up - operates simultaneously with switches.
- ...FULL 60 MINUTE RANGE - with total of 3600 possible time settings. That's right - you can set it for any combination of minutes and seconds with split second accuracy!
- ...AUTOMATIC SWITCHING at zero allows you to control two separate appliances having a total load of 750 watts.

Also, you have a choice of portable and panel mounting types with total ranges from 15 minutes to 60 hours. Certainly, for testing, engineering, general lab or production work, you'll find just the model you need.

Perhaps you can get immediate delivery of the GRALAB model you prefer from one of the many laboratory supply houses or industrial jobbers who feature our line. Or, if you like, just send your order directly to us.

Sincerely yours,

DIMCO-GRAY COMPANY

C. F. Dearth
Sales Manager

CFD:mk
Encl.